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Upton Gardens
H. R. Marriage
Colorado Springs, Colorado

ROCKY MOUNTAIN RARITIES
FROM COLORADO



Pikes Peak—Gardens above the clouds



Colorado Blue Spruce
Page 15



Blue Columbines from which we gather seed for you
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FOREWORD

ROCKY MOUNTAIN plants may be divided in two main groups for convenience in describing conditions under which they grow in their habitat. The first comprises Alpines, plants found near timberline and on up to the tops of the highest peaks. The second group comprises plants from the high dry plains, 5,000 to 7,000 ft. elevation.

ALPINE GROUP:

About 12,000 ft. high on Pikes Peak are huge red granite boulders softened with silver-green lichen, their perpendicular crevices filled with complete and utterly satisfying gardens of *Boykinia jamesii*. At the base of these parent boulders are smaller rocks, tons of them broken loose, among which are ravishing alpine gardens: *Mertensia coriacea* with bluest blue bells chiming a full peal, *Saxifraga chrysantha* like delicate fairy buttercups, and that tantalizing untamable beauty, *Eritrichium argenteum*.

These grow in a coarse chip-rock of disintegrated granite containing varying amounts of peat. They hibernate under a thick blanket of snow, which as it melts provides an underflow of water at the toes of the plants below. Thus the air and ground about them is always cool. The greatest success in growing alpines in hot regions at sea level has been achieved by providing as nearly as possible these conditions. A make-believe moraine or scree with water piped or tiled underneath and a dappled shade to break the direct rays of the sun will work wonders; this for the more difficult ones.

Many of the plants found on 14,000 ft. mountains in Colorado grow at sea level along the Arctic coast. *Dryas octapetala* which grows at 12,000 ft. on Pikes Peak I found luxuriating by the sea on the west coast of Ireland.

PLAINS GROUP:

Plants of the second group live under conditions totally different from those of the high mountains. The soil ranges from loose gravel to stiff clay or half decomposed shale, often alkali, sometimes neutral, rarely showing the slightest trace of acid, providing no such luxury as humus, for these plains are extremely dry except for occasional torrential rains in spring and midsummer. Winter is sunny with dry winds. Zero temperatures without the protection of snow is the usual lot of these plants. Typical of this group are *Melampodium cinereum*, many of the *Pentstemons*, *Townsendias*, *Yuccas*, *Galpinsia*, and of course the hardy Cacti.

Perhaps the only two conditions common to both groups are: (1) thorough drainage; (2) dry crowns after blooming.

Then there's a number of both alpines and subalpines, obliging creatures, that grow anywhere the soil is poor and porous, e. g. *Oenotheras*, *Artemisias*, *Antennarias*.

Directions and suggestions for growing new or little-known plants are rather futile. A condition moist for Colorado is usually dry for England; good garden soil may mean an infinity of things. Therefore a description of their habitat and its conditions will serve probably better than definite instructions.

In the following list I have indicated the conditions in which plants are found, or under which they grow well in our nursery where there's sunshine 360 days a year, zero temperatures without snow, followed by balmy days—a severe test for plants. Here we cover the alpine garden with conifer branches during winter as a substitute for snow, and with a lath shade in summer. Those plants listed without such indications are tolerant of widely varying insults in their treatment.

KATHLEEN N. MARRIAGE.

Many alpine seeds germinate well only after they have been subjected to frost, and a snow-covering works wonders.

In introducing the rare plants from the Colorado Rockies, we offer only species of distinct horticultural value. Many requests come for plants (usually negligible cousins of desirable species) of botanical rather than of aesthetic interest. These we will endeavor to collect if required for botanical collections. Duplicate specimens from our herbarium are available, also photographs of many species.

For identification we consult: New Manual of Botany of the Central Rocky Mountains by Coulter & Nelson; Rocky Mountain Flowers by Clements & Clements; Flora of Colorado by P. A. Rydberg.

The plants we offer are from our nursery. We can supply collected plants at lower prices, but we do not recommend them.

Seed offered is subject to crop. Number of seeds per packet is determined by rarity of variety; some packets contain 200 seeds, some 5.

TERMS:

Minimum order, \$1.00.

Cash with order or satisfactory references.

Packing free.

Postage prepaid on seeds in U. S. A. only.

We guarantee our plants to be true to name, vigorous and healthy. If not satisfactory, please return at once and we will gladly refund money or make adjustment.

We can make no guarantee as to the behavior of plants or seeds once they have been accepted, since success depends on factors not under our control.

To our customers in Great Britain and Ireland, prices may be computed at:

Twenty-five cents (25c) = one shilling.

Five dollars (\$5.00) = one pound.

Accounts may be paid either to Lloyds Bank, New St. Birmingham, England, or to Upton Gardens, Colorado Springs, Colorado.

To those interested in Alpines and Rock Gardens:

The American Rock Garden Society, 522 Fifth Ave., New York City.

The Alpine Garden Society, 71 Newman St., Oxford St., London, England.

Publications of interest on Alpines, Native Plants, and Rock Gardens:

The English Rock Garden by Reginald Farrer. T. C. & E. C. Jack, Ltd., London.

The Small Alpine Garden by Capt. H. P. Leschallas. Whitehill, Prestbury, Glos., England.

The Rock Garden by Louise Beebe Wilder. Doubleday, Doran & Co.

Rock Gardens by F. F. Rockwell. (The Home Garden Handbooks). The Macmillan Co.

Rock Garden Plants by Clarence Elliott. Edwin Arnold & Co.

North American Rock Plants by W. H. A. Preece. American Nurseryman, Chicago, Ill.

Flora of Rocky Mountain National Park by Ruth Ashton. Supt. of Documents, Washington, D. C.

National Horticultural Magazine, 821 Washington Loan & Trust Bldg., Washington, D. C.

ROCKY MOUNTAIN RARITIES

PLANTS AND SEEDS

PRICE: Plants, 50 cents each, unless otherwise noted.

3 of one variety for \$1.00.

10 of one variety for \$3.00.

100 of one variety for \$25.00.

Seeds, 25c per pkt., except where noted. Seeds are available of all varieties listed, except where "plants only" indicates that seed is scarce or unobtainable.

ABRONIA *fragrans*, Snowball. Cymes of strongly fragrant whitish flowers, semi-prostrate; lovely turned loose on dry sunny banks.

ACONITUM *columbianum*, Monkshood. Dark blue hoods, larkspur foliage; moist valleys; 3 feet.

ACTINELLA *acaulis*, Woolly Daisy. A well behaved, long season yellow daisy; soft gray foliage. Alpine, 4 inches.

ALLIUM, Wild Onion. Ordinary garden conditions.

cernuum. Rose pink flowers; graceful.

geyeri. Pink, like *A. textile*.

pikeana. A delicate fairy-like, erect edition of *cernuum* from Pikes Peak; peaty soil.

reticulatum. Rather like *A. cernuum*, but with erect head.

textile. White. A dwarf dry-plains species.

ANAPHALIS, Pearly Everlasting.

subalpina. Numerous white flowers on woolly white stems rising from flat silver foliage; gravelly soil.

ANEMONE, Windflower.

globosa. Deep rose pink, also white. Round, fluffy white seed heads.

pulsatilla. See *Pulsatilla hirsutissima*.

zephyra, Alpine Anemone. Like *A. narcissiflora*. Lovely clear white flowers and good foliage; acid bogs; plants only: seed sometimes available.

ANOGRA, White Evening Primrose. Sunny open places, any soil.

albicaulis. Large silky white flowers, twisting up into pink as they fade, profuse on low coarse plants. 6 to 10 inches; annual. Seed only.

ANTENNARIA, Pussy-Toes.

rosea. Heads of white or pink flowers; forms the neatest, flattest carpet of silver gray; gravelly soil, sun.

AQUILEGIA, Columbine. Well-drained leafmold soil.

coerulea. The exquisite blue and white columbine of the Colorado Rockies. Large graceful long-spurred blooms, specially selected strain; seed 50c per pkt. Seed from the wild, 25c per pkt.

longissima. Pale yellow flowers with 5-inch spurs which add unusual grace and charm. Award of Merit, Chelsea 1934. Large field grown plants, \$1.00 each; seed scarce, 50c per pkt.

saximontana (*brevistyla*). A rare and lovely alpine miniature of *A. coerulea* with shorter spurs. Blooms profusely in spring, then trickles occasional blooms later. Most attractive foliage; easy to grow where their roots can burrow indefinitely under a rock. Seed 50c per pkt.

ARAGALLUS (Oxytropis), Rocky Mountain Loco. Deep, well-drained friable soil.

lambertii. Bright rosy purple; silky silvery foliage. 8 inches.

splendens. Large soft heads in pastel shades; pinnate silver foliage. 10 inches.

ARCTOSTAPHYLOS *uva ursi*, Kinnikinnik. A splendid evergreen ground cover, neat shiny leaves, scarlet berries. Balled and bur-iapped, \$1.00 each; 3-inch pots, \$3.00 per 10.

ARENARIA, Sandwort. Sandy soil.

aequicaulis. Tiny white stars rising above loose moss-like foliage.

macrantha. Like *A. sajanensis*, but looser and taller. Large white stars. Plants only; seed sometimes available.

sajanensis. Close green moss-like carpet dotted with clear white stars.

ARGEMONE, Prickly Poppy. Full sun, neutral soil, probably resents acid.

intermedia (*platyceras*). Large clear white poppy flowers with a generous centerpiece of yellow stamens; ornamental glaucous foliage. 13 inches. Treat as an annual. Seed only.

ARTEMISIA, Mountain Sage. Dry sunny situations.

frigida. Finely cut silver foliage, fragrant; unusually good as a neat shorn border.

pedatifida, Birdfoot Sage. Diminutive, caespitose, silver foliage. Plants only.

ASCLEPIAS, Butterfly Plant. Dry sunny situations.

pumila. Heads of small white flowers on six-inch stems, elbowing their way out of needle-like foliage. An attractive thing, easy to grow.

tuberosa. Flat heads of bright orange on stiff erect stems. Good as a cut flower. 1½ to 2 ft.

ASTER. Well-drained soil, sun.

canbyi. An aster which really is clear pink, no lavender or magenta. 12 to 18 inches. Seed crop variable.

laevis (*subalpinus*). Lavender blue. Erect habit, 1 to 2 ft.

porteri. Small white flowers along arching stems. A delicate, lovely thing for the perennial garden or large rock garden. 1½ to 3 ft.

ASTRAGALUS, Vetch. Plants difficult, seed more successful. Requires well-drained friable humus soil.

aculeatus. A soft close cushion of miniature-lupin foliage and lavender flowers. Alpine.

drummondii. White flowered, feathery looking plant. 1½ ft.

BERBERIS. Any well-drained soil.

repens (*aquifolium*), Colorado Holly. An excellent dwarf evergreen mahonia. Yellow flowers, blue berries. Neat ground cover, spreads by underground runners. Plants 75c each. Rooted cuttings \$2.00 per dozen.

BOSSEKIA (*Rubus*).

deliciosa, Thimbleberry. Garlands of clear white wild-rose flowers on arching branches. Good foliage. A most attractive and valuable hardy shrub; 4 to 6 ft. Easy to grow. \$1.00 each, \$7.50 per dozen.

Keep crowns of alpiners from winter wetness.

BOYKINIA.

jamesii (*Saxifraga jamesii*). A rare alpine from Pikes Peak. Profuse bright rosy pink to red flowers rising from neatly plaited heuchera-like leaves. Probably the most brilliant of the saxifrages. Seed 50c per pkt.

CACTI. Nomenclature on Colorado Cacti still vague. Well-drained soil or gravel; full sun.

Echinocereus, Hedgehog Cactus.

aggregatus. Orange-scarlet flowers with conspicuous green styles, followed by little russet apples. Large clumps \$2.50. Single balls 50c.

gonacanthus. Scarlet flowers. Plants similar to *aggregatus*, but clear blue-green of the succulent thick ribs is more evident than the spines. Large clumps \$2.50. Single balls 50c.

viridiflorus. Small knobs; primrose-yellow flowers.

Mamillaria, Ball Cactus.

vivipara (probably *Coryphantha vivipara*). A pin-cushion; bright rosy-purple flowers.

Opuntia.

arborescens (*imbricata*). Tree Cactus. Flowers vivid pinky-purple. Bright yellow conspicuous seed pods. Large plants \$1.00 each, small 50c each.

fragilis. Small roundish joints, caespitose, 2 to 4 inches. Yellow flowers, shy bloomer. Plants only.

humifusa. Clear yellow flowers, similar to *O. polycantha* but fewer spines.

polyacantha. Makes a large spreading mass; flowers yellow.

rhodantha. Like *O. polycantha*. Flowers rosy-red.

Pediocactus.

simpsonii. An interesting ball variety, subalpine. Lovely satin pink daisy-like flowers. Seed scarce. 50c per pkt.

We also offer a collection of cacti from the deserts of the Southwest. Five varieties \$2.00. Large ball cacti \$1.00 each and up.

CALLIRHOE, Poppy Mallow.

involverata. Reddish purple mallow-like flowers, flat-growing hairy stems. Seed only.

CALOCHORTUS, Mariposa Lily. Well-drained, deep soil.

gunnisonii. Lavender to white cups on graceful stems. Bulbs \$1.00 per dozen. \$6.50 per 100.

CALTHA rotundifolia, Marsh Marigold. Clear waxy white petals, showy yellow stamens. Good in boggy places.

CALYPSO bulbosa, Fairy Slippers. Fascinatingly elf-like. A pink moccasin with spurs; 4 inches. Grows on a rotted log in dense shade. Plants only.

CAMPANULA, Harebell.

parryi. Large lavender blue upturned flowers on slender erect stems. A striking little thing.

petiolata. A dwarf, one-flowered *rotundifolia*. Alpine.

rotundifolia. Blue, nodding flowers on slender stems. Also a white form which is good.

CARDAMINE, Brook Cress.

cordifolia. Heads of white flowers like candytuft, but with better foliage. 1 ft. Plants only.

Cacti are singularly tolerant.

CASTILLEJA, Paint Brush. Probably parasitic, hence difficult to establish.

collina. Scarlet bracts, 1 ft. stems.

haydenii. Bright old-rose flowers; alpine.

occidentalis. Dwarf, yellow tinged with dark red; alpine.

sulphurea. Soft yellow; subalpine.

CEANOTHUS, Buckthorn.

fendleri. A dwarf spiny subalpine shrub, small white flowers. 2 ft. Young plants \$1.00 each, \$7.50 per dozen.

CERASTIUM, Mouse Ear.

arvense. Forms a green carpet from which rise quantities of white flowers. 4 inches.

CERCOCARPUS, Mountain Mahogany.

parvifolius. A subalpine shrub; thousands of spiral plumose seed-tails lend a silky haze to bleak stony hillsides. 5 ft. Young plants \$1.00 each, \$7.50 per dozen.

CHAMAENERION (Epilobium). Tolerant of conditions, but resents being transplanted.

angustifolium, Fireweed. Brilliant purple-pink spikes, 2 to 3 ft.

CHIONOPHILA, Snowlover.

jamesii. Perky little spikes of white two-lipped flowers. Alpine; 4 inches. Scree with a dash of leafmold.

CLAYTONIA, Spring Beauty.

megarrhiza. Rosettes of shining succulent deep green, circled, as an after-thought, by a wreath of little white flowers pink backed. Scree.

CLEMATIS, Virgin's Bower. Tolerant of almost any condition.

douglasii. Attractive blue flowers. Clarence Elliott says, "Like a Paris hat." Pinnate foliage. 1 to 2 ft.

ligusticifolia. White flowers and fluffy seed heads in abundance; a rampant climber.

pseudoalpina. Lavender to blue; an obliging plant, grows flat or climbs. Semi-shade.

scottii. Thick blue-purple flowers. Shrubby to climbing habit. 2 ft.

CORNUS canadensis. Suggests a dwarf, four-petal trillium; 6 inches. Shade. Plants only.

CORYDALIS aurea, Golden Smoke. Forms a little bouquet of dainty filigree in iridescent gray with half-hidden yellow flowers; early. Resents transplanting; impermanent but self-sows.

CRASSINIA grandiflora. Miniature single yellow zinnia, from sunny dry plains.

CRATAEGUS, Hawthorn.

coloradensis. A low, well-branched tree; clusters of scarlet berries lovely with large coarsely-toothed leaves. Exceptionally hardy. Seed only.

CYPRIPEDIUM parviflorum, Yellow Lady Slipper. Lovely butter-colored blobs, moccasin shaped. 6 to 10 inches.

DASYPHORA. see *Potentilla*.

DELPHINIUM.

scopulorum, Mountain Larkspur. Deep blue. 3 ft. Grand in masses.

DODECATHEON, Shooting Star.

pauciflorum (prob. *radicatum*). Suggests a perky miniature cyclamen family on one erect stem. Floriferous, good. 8 inches. Moist, semi-shade.

Give *Cypripediums* and *Calypsos* leafmold and shade.



Phlox
condensata
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Saxifraga chrysantha—a tiny alpine
Bright buttery yellow cups
Page 13



Aquilegia saximontana
A charming miniature Columbine
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Leucocrinum montanum
Sand Lily

Refined and lovely

Page 9



Yucca glauca
and
Opuntia polycantha



Melampodium cinereum
Colorado Rock Daisy

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DRABA, Rock Cress.

densifolia. Small yellow flower heads over dense hairy rosettes; alpine. 4 inches.

DROSACE *carinata* (*Androsace chamaejasme*). White forget-me-not flowers on short erect stems clasped by rosulate clusters of little bright green leaves. An alpine gem for the rock garden, easily grown.

DRYAS, Mountain Avens.

octopetala. Dwarf, spreading alpine shrub, 3 inches. Dense shining foliage, large white flowers. Fluffy silver seed heads.

DRYMOCALLIS, Leafy Cinquefoil.

fissa. Yellow, geum-like. 8 to 10 inches.

EPILOBIUM, see *Chamaenerion*.**ERIGERON**, Daisy.

compositus. Clear lavender, dwarf daisy. Fern-like foliage. 4 inches. A really good rock plant.

coulteri. Large white flowers, basal foliage. Seed sometimes available. 18 inches.

flagellaris. A slender semi-prostrate one. Pink to white. Apt to monopolize territory. 3 inches.

macranthus, Aspen Daisy. Clear lavender blue in clusters; a splendid garden daisy. Blooms in June and all summer if kept cut. 18 inches.

uniflorus. Pink to lavender; useful in the rock garden. 6 inches.

ERIOGONUM, Buckwheat.

subalpinum. Creamy-yellow to pink. Flat heads on 10-inch stems rising from low mats of leathery foliage. Makes a bright lasting mass of color.

umbellatum. Like above, but yellower and more floriferous.

ERITRICHIUM, Alpine Forget-me-not.

argenteum. A miniature *E. nanum*. Farrer is right—"Irresistible wads of silver, hidden by a mass of little rounded faces of a pure clear celestial blue." Difficult to tame. Plants \$1.00 each. Seed 50c per pkt.

ERYSIMUM, Wallflower.

asperum. Yellow to orange. Slender, 1½ ft. Seed only.

nivale. Lemon yellow well-formed heads of fragrant flowers; found in alpine regions. 6 inches. Seed only.

ERYTHRONIUM, Snow Lily.

parviflorum. Little lilies of soft clear yellow that bloom as the snow melts.

EUROTIA *lanata*, White Sage. Attractive silver gray foliage; flowers inconspicuous.

FERNS.

Asplenium filix femina, Lady Fern. Quick grower, 2 ft.

Botrychium lunaria, Grape Fern. Tiny, fleshy, less than an inch high; scarce.

Dryopteris filixmas (*Aspidium spinulosum*), Male Fern. Large fronds, vigorous.

Filix fragilis, Brittle Fern. A dainty little one, 6 to 8 inches.

Notholena fendleri, Cloak Fern. Triangular leaved, suggesting a diminutive wiry maidenhair. Reverse of leaves covered with a cloak of whitish powder.

Phegopteris dryopteris, Oak Fern or Beech Fern. Delicate little triangular fronds, 5 to 10 inches; moist shade.

Pteridium aquilinum (*Pteris aquilinum*), Bracken, Eagle Fern. Large triangular fronds with several triangular divisions. 2 to 4 ft. Scarce in Colorado.

Woodsia scopulina. Small, tufted. Found in exposed dry rock clefts.

FORESTIERA, Mountain Privet.

neo-mexicana. Good privet-like shrub, extremely hardy and drought resistant. \$1.00 each.

GALIUM, Lady's Bedstraw.

boreale. Lacy heads of tiny white flowers, excellent as an early cut flower. Fine linear foliage. 1 ft.

GALPINSIA (*Oenothera*).

lavandulaefolia. Yellow primrose-like puckered flowers turning to orange-red; of shrubby habit. Dry slopes. 6 inches.

GENTIANA, Gentian. Cool, moist, acid soil.

affinis. Elongated drops of deep blue wax above dark green lance-like leaves. Almost a closed gentian.

elegans. Rocky Mountain Fringed Gentian. Lovely in drifts, of intense blue. Likes to keep its feet wet. Annual, seeds only.

parryi. Brilliant deep blue flowers, several on a stem. Alternate, newly washed leaves. Good in dappled shade. 1 ft. *G. calycosa* is probably identical.

romanzovii (*frigida*). A chic little lady in second mourning. White with a black stripe at each corner. 4 inches.

GERANIUM, Cranesbill.

parryi. Lavender-pink; long blooming season. "Cranesbill" is apt for arrangement for seed dispersal.

richardsonii. White flowers.

GILIA. Well-drained soil, sun.

aggregata, Skyrocket. Erect stems bearing quantities of flame-pink bugles. 2-3 ft. Makes lovely masses on a slope. Biennial.

globularis (*capitatum*). Small heads of white fragrant flowers in clusters. Alpine. 4 to 6 inches. Seed only.

nuttallii (*floribunda*). Clear white phlox-like flowers with yellow throats. Blooms all summer here; woody stems. Clean bright green needle-like foliage. 4 inches. Scree-ish conditions.

HALERPESTES, Trailing Buttercup.

cymbalaria. A miniature buttercup. A quick filler for moist shady corners.

HELENIUM (*Dugaldia*).

montanum. Large golden yellow daisies in loose clusters on 2 to 3 ft. stems. Bright patches of color, July and August.

HEUCHERA, Alumroot.

hallii. Slender graceful stems of creamy white flowers, good clean foliage. Enjoys perpendicular toe-holds; shade among rocks.

HOLODISCUS, Mountain Spiraea.

dumosus (*microphyllus*). Slender branched shrub bearing fluffy racemes of attractive creamy white flowers. Long blooming season. 4 to 5 ft. Young plants \$1.00 each, \$7.50 per dozen.

HYPERICUM, St. John's Wort.

formosum. Cymes of small waxy yellow to orange flowers; stamens in attractive clusters. 12 inches. Moist deep soil. Scarce.

IPOMOEA leptophylla, Bush Morning Glory. Quantities of showy pink flowers, linear glabrous leaves. A slender wiry bush; enormous roots go 6 ft deep. Seed sometimes.

IRIS.

missouriensis, Wild Iris. Clear lavender-blue flowers, the character of Spanish Iris. Blooms earlier than intermediates. Enjoys moist meadows. 1 to 2 ft.

missouriensis, Snowbird. Clean white flowers of good substance. Seed sometimes available.

JAMESIA, Wax Flower.

americana. A philadelphus-like shrub. Wax-white flowers in clusters amidst soft green leaves. Clings well to gravel slopes. 3 to 5 ft. Young plants \$1.00 each, \$7.50 per dozen.

KALMIA, Laurel.

polifolia nana (microphylla). A miniature alpine laurel. Clusters of delicious pink up-turned bells just above little shiny evergreen leaves. Insists upon moist acid soil. 3 inches.

LAVAUXIA flava. A flat-growing *Oenothera* with clear yellow flowers and the best behaved foliage of the family. Moist soil.

LEPIDIUM, Peppergrass. Dry slopes, sun.

alyssoides. Masses of small white Baby-Breath flowers. 1 ft. Annual, seed only.

LESQUERELLA, Bladderpod.

condensata. Rosettes of thickish gray leaves encircled by pale yellow flowers. 4 inches. Inflated papery pods of iridescent pink. Makes lovely silver saucers on gravel slopes. Subalpine.

stenophylla. A coarser one. Flourishes on dry mesas; plants only.

LEUCOCRINUM, Sand Lily.

montanum. Fragrant porcelain white star flowers, stemless, guarded by glaucous lance-like leaves. Blooms early spring. Beautiful and distinctive; dry sandy soil, sun.

LEWISIA, Bitterroot. Moist soil.

pygmaea. A very tiny neat one. Coy pink flowers. Alpine.

rediviva. Waxy geranium-pink blossoms among rosettes of succulent leaves which disappear after blooming season.

LIATRIS, Blazing Star.

punctata. Brilliant magenta spikes, linear leaves. In seed a feathery plume. Dry sandy soil. 1 ft.

LILIUM philadelphicum, Wood Lily. Rich orange red, a slender woodsy delight. Plants only.

LINARIA, Butter and Eggs. Sun.

vulgaris. Like a miniature snapdragon; clear yellow (really not vulgar). Easily grown; makes a yellow mass of nice texture.

LINNAEA, Twin Flower. Acid soil, shade.

americana. A slender trailing evergreen. Clear pink little flowers in pairs; clean roundish leaves. Plants only.

LINUM perenne, Blue Flax. Large flowered, 2 ft.**LITHOSPERMUM**, Puccoon. Dry sandy soil.

angustifolium. Attractive little yellow polyantha flowers, thin hairy leaves. Blooms early. 8 to 12 inches.

multiflorum. Flowers smaller, deeper yellow. Blooms a little later.

LLOYDIA serotina, Alpine Lily. Relatively large creamy white flowers touched with pinky purple. Alpine. 2 to 6 inches.

LONICERA involucrata, Twinberry. Native subalpine honeysuckle. Pairs of yellow flowers; large shiny black berries. Moist shade. 3 to 4 ft. Young plants 75c each, \$7.50 per dozen.

Iris missouriensis makes lovely masses in the small garden.

LUPINUS.

alpestris, Mountain Lupine. Dignified spikes of blue-purple above soft green palmate foliage. Seed only.

argenteum. Silvery foliage, blue flowers, bushy habit.

LYCHNIS montana, Miniature Jack-o-lantern. Flower and seed pod attractively zebra-striped. Alpine, easy to grow.

MALVASTRUM (Sphaeralcea) **coccineum**, Cowboy's Delight. Flowers of brilliant orange-red silky sheen, well set off by incised gray felt foliage. Sunny dry banks. 6 inches.

MELAMPODIUM cinereum, Colorado Rock Daisy. Clear white helianthemum-like flowers. Small neat plants with aspirations toward shrubbiness. A really valuable find for the sunny rock garden; continuous bloom. 6 inches.

MARIPOSA LILY, see *Calochortus*.

MENTZELIA, Evening Star. Dry sunny banks.

multiflora. Bright yellow pointed petals, decorative stamens.

nuda. Creamy white; also well branched white stems. Both species open late afternoon. 1 to 2 ft.

MERTENSIA, Chiming Bells. Moist shade.

ciliata, Languid Lady. Tall, graceful gray-green foliage remains attractive after light blue flowers have fallen. 1 to 2 ft.

coriacea (alpina). Pikes Peak Forget-me-not. One of the bluest blue flowers. Much neater than *mertensia* generally; alpine. A glorious splash of the blue of Colorado sky in the rock garden. 4 inches.

lanceolata. A small, narrow-leaved *M. ciliata* from open hillsides; early, but shyly hangs its head. 10 inches.

MIMULUS, Monkey Flower.

langsдорffii. Two-lipped yellow flowers freakishly spotted with dark red; bright green foliage. 1 ft. At home along stream banks. Plants only; seed sometimes available.

MIRABILIS, Wild Four-o'clock.

multiflora. Magenta flowers, well-clothed stems, widely branched. 2 ft. Not so *mirabilis*.

MONARDA, Horsemint.

fistulosa (*menthaefolia*). Cluster of purple gaping mouths; a fragrant plant. 1½ ft. Plants only; seed sometimes available.

MONESES uniflora, Star Flowered Pyrola. A pert white star tipped on edge. Demands dense shade and is happy only on a rotted log. 4 inches. Plants only.

MONTIA chamissonis, Water Spring Beauty. A halo of white flowers; succulent foliage. Good bog plant; stoloniferous. Plants only.

NYMPHAEA polysephala, Water Lily. Clear lemon yellow flowers, 2 to 3 inches broad; on alpine lakes. Plants only, \$1.00 each.

OENOTHERA. see *Pachylophus*.

OREOXIS (*Cymopterus*).

alpina, Alpine Parsley. Cymes of buttery yellow and burnt orange flowers, dwarf.

OXYRIA digyna, Alpine Sorrel. Ruddy racemes, of sepals and seed pods, rising from small round leaves. A good little plant for moist shade.

PACHYLOPHUS (*Oenothera*).

caespitosus, Fragrant Primrose. Large white flowers changing to pink; good clean foliage; the flattest of the family. An excellent covering for sunny gravel slopes.



*Gentiana
romanzovii*

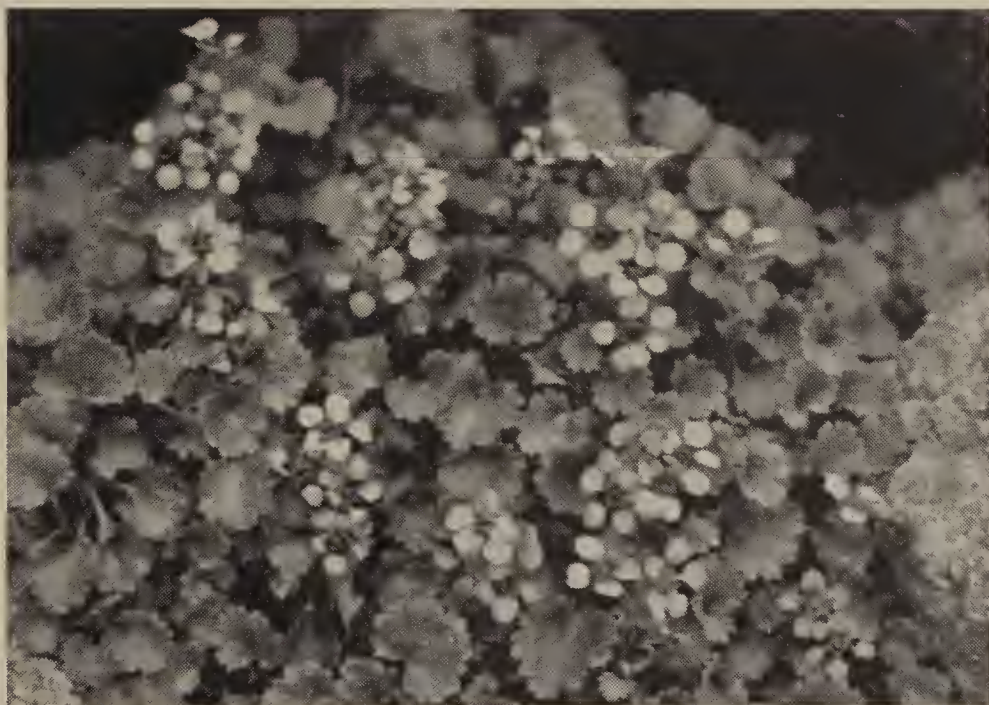
A chic little lady

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Pentstemon crandalli—Turquoise blue
An easy and lovely rock plant

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Boykinia jamesii
Brilliant rosy red
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Yucca glauca
Stiff soldiers in military helmets
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Cactus opuntia polycantha
Clear yellow silky flowers
Page 5

PACHYSTIMA myrsinites, Mountain Lover. Smooth opposite leaves; a dwarf evergreen shrub. Woodsy shade. Plants only.

PARNASSIA, Grass of Parnassus. Moist meadows.

parviflora. Small starry white flowers on slender stems, basal roundish leaves. 6 inches. Seed only.

PARONYCHIA pulvinata, Whitlow-wort. A gray-green cushion with inconspicuous white flowers, from a woody root; alpine. Plants only.

PEDICULARIS groenlandica (Elephantella). Staffs adorned with tiny reddish purple elephant heads; fern-like foliage. Bog plants, hard to establish.

PENTSTEMON, Beardtongue. Most of these pentstemons are found on neutral or alkali soil, which seems to give them clear complexion. On acid soil the color tends to muddiness.

alpinus. Profuse spikes bearing flowers of clear deep ultramarine.

ambiguus, Prairie Fairy. Delicate pink flowers, flax-like. A graceful plant and strikingly different. 1 ft.

angustifolia. Flowers of dazzling deep turquoise intensified by linear gray-blue foliage.

barbatus, Fire Cracker. Flame red, fascinates the humming birds.

brandegii. A large edition of *P. alpina*, but less intense blue.

caespitosus. Flowers of sky-blue from flat mats of leathery leaves. Plants only.

crandallii. Brilliant with the loveliest turquoise upturned flowers. filiform gray-green foliage on wiry stems. A low spreading plant. fairest of the family for the rock garden.

glaucus stenosepalus. Interesting dull purple flowers, occasional off-white ones.

grandiflorus. Large lavender-blue flowers; a strong plant. 3 ft.

humilis. Small blue flowers with a touch of lavender, slender stems from dark green mats. Lovely in drifts emerging from pine woods.

jamesii. Pinky lavender; linear foliage; a dry plains variety. 1 ft.

procerus, Clustered Pentstemon, Small deep blue-violet whorls. 8 to 10 inches.

rydbergii. Similar to *procerus*, but more robust.

secundiflorus. Bright blue, open-faced flowers; now and again a pink variety. Another good one from dry plains.

spectabilis. Clear rose pink flowers, glaucous foliage. 2 ft.

unilateralis. Many flowered, blue-lavender, short tubes with broad lips. Also a good clear pink variant.

PERICOME caudata. Small yellow heads, a bushy composite; from rocky canons. 3 ft. Seed only.

PETALOSTAMEN purpureus, Prairie Clover. Dense terminal spikes of rosy purple. 1 ft.

PHACELIA, Purple Fringe.

sericea. Racemes of brilliant purple with extended bright yellow anthers. Alpine, 10 inches.

Pentstemons demand a dry, gravelly sunny place.

PHLOX. Seed crop variable. We list "plants only" but occasionally can supply seed in limited quantities.

andicola. Clear white flowers generous on plants of desert prickliness. Stoloniferous; thrives on any well-drained, non-acid soil.

bryoides. Farrer says, "Ample, round-faced white flowers poked into a ball of fluffy moss." Sunny rocky ridges. Plants only.

condensata. Dense mats of sharp gray-green foliage displaying a "Milky way." Like a glorified arenaria. Alpine screes. Another enchanting if—. Seed 50c per pkt.

PHYSARIA, Double Bladderpod.

didymocarpa. Lovely little silver rosettes, even more attractive when surrounded by their large yellow flowers and puffy double pods. Gravel. Scarce.

POLEMONIUM. Leafmold soil.

confertum, Sky Pilot. Clusters of clear deep sky blue bell-shaped flowers with orange anthers, harmonious pinnate foliage. Alpine, 8 to 10 inches.

pulcherrimum. Jacob's Ladder. Fern-like foliage, well sprinkled with open light blue flowers. 6 to 8 inches.

POLYGONUM (Bistortoides), Bistort. Fuzzy white millet-like heads on jointed slim stems. Narrow smooth leaves. 1½ ft.

POPULUS tremuloides, Quaking Aspen. White birch-like bark, tall slender trunks. The open tracery of light green leaves, which in autumn turn bright yellow and orange, makes lovely dappled shade. Nursery grown whips, \$1.00.

POTENTILLA (Dasyphora). Garden soil.

fruticosa, Shrubby Cinquefoil. Numerous yellow flowers; an attractive shrub of good habit. Long blooming season. Young plants 75c.

gracilis. Small yellow flowers, silvery green foliage.

monspeliensis. Coarser than *gracilis*; many stamens. Impermanent.

PRIMULA.

angustifolia, Fairy Primrose. A choice alpine one, brave rose-pink flowers that greet a hailstorm open-faced. Companionable dark green leaves. 2 inches. Excellent for the rock garden if its toes are kept moist. Seed 50c per pkt.

parryi, Queen of the Alpine Brooks. Brilliant clusters of large rose to rosy-purple flowers, oblong smooth green leaves. A handsome plant, of strong fragrance. 1 ft. Seed 50c per pkt.

PRUNUS besseyi, Sand Cherry. A sturdy low spreading shrub bearing large dark red cherries. Plants 75c each.

melanocarpa, Chokecherry. A good shrub to form screens, easy to grow under adverse conditions. Young plants 75c each.

PSEUDOCYMOPTERIS. Well-drained soil.

anisatus. Leaves finely cut, of strong anise fragrance. Mustardy yellow flowers. 6 inches. On open dry mountainsides.

montanus (like *multifidus*). Pretty cymes of little yellow flowers on slender stems; parsley-like foliage.

PULSATILLA hirsutissima, Pasque Flower. Lavender to purple, like a downy crocus. Fairy-broom seed heads.

PYROLA, Wintergreen. Acid leafmold or a rotting log; shade.

secunda. Whitish flowers. Basal leaves make a good small ground cover.

uliginosa, Bog Pyrola. Glossy roundish leaves. Spikelets of pink bells with their tongues hanging. Seed sometimes available.

uniflora. see *Moneses*.

QUERCUS gambellii, Scrub Oak. A shrubby tree, growing in interesting groups. Rough gray bark; shiny leaves brilliant in autumn. Plants 75c each; seedlings \$2.00 dozen.

RANUNCULUS, Buttercup.

acriformis. Many flowered, yellow. Subalpine meadows. 8 inches.

eximius, Snow Buttercup. Large yellow overlapping petals, a surprise at the edge of snow banks. Deeply cut foliage. Plants only; seed sometimes available.

macauleyi. Yellow petals slightly toothed. Spatulate bright green leaves also toothed. Scarce.

RHUS trilobata. Squaw Bush. Fuzzy red berries; diffusely branched shrub, good on bleak hillsides. Young plants 75c each, \$7.50 per dozen.

RIBES cereum, Squaw Currant. Rounded clumps, much branched. 2 ft. Plants 75c.

ROSA woodsii, Rocky Mountain Rose. Many flowered, warm pink, fragrant. Ornamental bright red hips; leaves turn deep red late autumn.

RUBUS, see *Bossekia*, page 4.

RUDBECKIA hirta, Black-eyed Susan. Velvety brown buttons fringed with yellow rays.

RUMEX venosus, Rosy Dock. Puffy begonia-rose bracts; oblong leaves from running rootstocks. Dry sunny places.

RYDBERGIA grandiflora, Little Old Man of the Mountains. Large yellow daisy flowers, short shaggy-haired stems and downy leaves. An impish fellow: alpine, impermanent.

SAMBUCUS, Elder.

microbotrys (*racemosa*), Red Berried Elder. Clusters of scarlet berries. A good compact shrub. 3 ft. Plants \$1.00 each, \$7.50 per dozen.

SALIX, Willow. Moist soil.

chlorophylla. Semi-dwarf, broad leaves, bright brown twigs. Plants only.

glaucops. Gray-green foliage. Alpine, 1 to 3 ft.

saximontana (*reticulata*). Patches of new-leather leaves; flat creeping, alpine. An excellent shrub for the rock garden.

SAXIFRAGA, Saxifrage. Gravel and rocks.

arguta (*punctata*), Brook Saxifrage. Dainty white flowers on tall slender stems, notched round leaves.

austromontana, Dotted Saxifrage. Profuse small white flowers spotted with red on 3-inch stems from prickly dense rosettes. A good rock garden standby.

chrysantha, Golden Alpine Saxifrage. Myriads of tiny clear yellow cups enclosing orange anthers, from carpets of snug miniature rosettes, bright green. Doubly precious, after other high alpiners are over. 2 inches.

flagellaris. Fewer yellow flowers; leafy stem and red tipped rosettes outlined with short bristles; stoloniferous. 3 inches. Alpine, rare.

nivalis, Snowball Saxifrage. Close white heads on the thickish stems, flat leathery leaves.

SCUTELLARIA brittonii. A cute little blue skullcap.

SEDUM, Stonecrop.

integrifolia (*rhodiola*), King's Crown. Flat dense heads of bright crimson; excellent foliage. 6 inches.

rhodanthum, Queen's Crown. Racemes of pink flowers. Similar to *S. integrifolia*, but taller; likes stream sides. 10 inches.

stenopetalum. Tawny yellow flowers from tidy tufts of succulent glabrous leaves. 3 inches.

SENECIO fendleri. Open rosettes of crinkly gray foliage, lovely in winter, too; should not be allowed to bloom. Gravelly slides.

SHEPHERDIA, Buffalo Berry.

argentea. Shrub to small tree, lanceolate silver foliage; lavish scarlet berries. Plants \$1.00 each, \$7.50 per dozen.

canadensis. A subalpine shrub, deep green leaves, rusty silver underneath. Clusters of red berries. Happy in moist woods. 3 ft. Plants \$1.00 each, \$7.50 per dozen.

SIEVERSIA (Geum).

ciliata, Pink Plumes. Strawberry pink gargoyles in threes, fuzzy in seed. Not quite trim enough for the rock garden.

turbinata (Geum rossii). Open bright yellow flowers; dark green or purplish foliage, finely cut. Persistent bloomer; alpine, 10 inches.

SILENE acaulis, Moss Champion. Bright rose-pink needlepoint on lovely green cushions. Alpine; easy to grow.

SISYRINCHIUM angustifolium, Blue Eyed Grass. Little bright blue flowers coyly hidden by linear leaves and bracts; one of the iris family. Moist meadows. 6 inches.

STANLEYA, Yellow Plume.

bipinnata (glauc). Erect yellow torches, in moist swales on the plains. 3 ft. This has proved a most attractive plant in the perennial border. Cut after first bloom, it makes an airy spire effect near yellow chrysanthemums, notably the Korean Sappho.

SYNTHYRIS, Kittentails.

alpina. Purplish-blue flowers on racemes, dwarf phacelia-like. Alpine. 3 inches.

plantaginea. A grown-up alpina. Thick basal leaves. Hardly worth growing.

THALICTRUM, Meadow Rue.

alpinum. Low-lying foliage; miniature. On grassy bog humps.

fendleri, Maiden's Hair. Columbine-like foliage, flowers inconspicuous. Moist aspen woods. Plants only.

THERMOPSIS montana, Golden Banner. Showy heads of pea-like yellow flowers; easy to grow. Light shade. 1 ft.

THLASPI coloradense, Alpine Candytuft. A dwarf baby candytuft, white; early on granite gravel slopes.

TOWNSENDIA, Easter Daisy. Dry sandy open slopes.

exscapa. Early pale pink flowers nestling in narrow gray foliage. 2 inches.

grandiflora. Large white daisies, lavender backed; attractive, low growing. 4 inches.

TRADESCANTIA virginiana, Spiderwort. Three cornered, clear blue flowers with bright yellow stamens. 15 inches.

TRIFOLIUM, Alpine Clover. A home-sick family; better grow them from seed.

dasyphyllum. Lavender tinted flowers in heads; low tufted foliage. 3 inches.

nanum. Diminutive, violet purple pea-flowers nestling at the edges of the tufts.

parryi. Large clover heads, rose purple. 6 inches.

TROLLIUS albiflorus, Alpine Globe Flower. Wax white single flowers with conspicuous yellow stamens; deeply cleft foliage. A lovely thing. Acid bogs.

VALERIANA acutiloba, Valerian. Cymes of pinky white; bright green basal foliage. Shade. 1 ft.

VERBENA bipinnatifida. Blue-violet clusters, sturdy foliage: a dash of color on dry plains. Annual, seed only.

VIOLA, Violet. Moist, leaf-mold soil generally.

bellidifolia. Small deep lavender flowers; tufted foliage, short stems.

biflora. Perky little yellow flowers with tiny dark markings; round leaves. Alpine.

blanda, White Sweet-Violet. Fragrant white blossoms slightly veined; somewhat stoloniferous.

canadensis. White, purple-veined flowers; large heart-shaped leaves, leafy stems; stoloniferous. 8 inches. Seed sometimes available.

nuttallii, Prairie Violet. Bright yellow; long leaves. One of the few violas to thrive on prairies. 3 inches. Seed sometimes available.

pedatifida (delphinifolia), Bird-Foot Violet. Large blue flowers; finely cut foliage. 4 inches.

YUCCA glauca, Soapweed. Tall strong spikes of primrose-white flowers; evergreen sword-like foliage. A good foil in cactus gardens.

ZYGADENUS, Wand Lily. Moist loam.

elegans. Creamy white flowers clustered along 18-inch stems; lily-like foliage.

intermedius. A dwarf alpine form of above.

COLORADO EVERGREENS

Seed, 25c per pkt.

Little trees of several of these varieties, 4 to 8 inches, 10 for \$1.50.

Trees to 20 ft., quotations on request.

Abies concolor, White Fir.

Juniper communis depressa, Ground Juniper.

Juniper monosperma, Green Cedar.

Juniper scopularum, Silver Cedar.

Picea englemannii, Engelman Spruce.

Picea pungens glauca, Blue Spruce, especially selected, 50c per pkt.

Pinus aristata, Foxtail Pine.

Pinus contorta, Lodgepole Pine.

Pinus edulis, Pinon Pine.

Pinus flexilis, Limber Pine.

Pinus ponderosa, Yellow Pine.

Pseudotsuga douglasii, Douglas Fir.

COLLECTIONS

For Your First Attempt

Two each of:

Dodocatheon pauciflorum, Shooting Star
 Galium boreale, Lady's Bedstraw
 Scutellaria brittoni, Skullcap
 Pachylophus caespitosus, Fragrant Primrose
 Aquilegia coerulea, Colorado Blue Columbine
 Pentstemon humilis
 Leucocrinum montanum, Sand Lily
 Sedum stenopetalum
 Campanula parryi
 Silene acaulis, Moss Champion

Collection: \$4.50

For the Connoisseur

Two each of:

Mertensia coriacea	Saxifraga chrysantha
Aquilegia saximontana	Phlox condensata
Boykinia jamesii	Primula angustifolia
Eritrichium argenteum	Kalmia polifolia nana
Gentiana romanzovii	Primula parryi

Collection: \$7.00

For Your Sunny Wall Garden

Two each of:

Pentstemon crandalli	Cerastium arvense
Melampodium cinereum	Phlox stansburyi
Townsendia grandiflora	Crassinia grandiflora
Malvastrum coccineum	Galpinsia lavandulaefolia
Viola nuttalli	Penstemon caespitosus

Collection: \$5.00

Silver Foliage Rock Plants

Two each of:

Antennaria rosea	Malvastrum coccineum
Lesquerella condensata	Senecio fendleri
Aragallus splendens	Anaphalis subalpina
Physaria didymocarpa	Artemisia frigida
Argemone intermedia	Actinella acaulis

Collection: \$5.00

ROCKY MOUNTAIN EXPEDITION 1937

Summer 1937 we undertook an expedition into virgin territory in the Rockies in quest for new things of horticultural value, chiefly for alpine plants from the high mountains.

We found several promising species, most of them already discovered by botanists, but known only as dried herbarium specimens. We secured photographs, plants, and seeds when possible. The expedition was financed by subscribers interested in the introduction of rare or new alpine plants.

Of our discoveries, plants or seeds of the following will be available 1939, at these tentative prices: seeds 50¢ per packet, plants \$1.00 each.

Anogra coronopifolia. A low, flat, neat member of a somewhat untidy family. Anthers showy against a white perianth of finest silk. Dry alkali plains.

Anemone parviflora. White single flowers on 4-inch stems: a dainty stray from the Arctic; high mountain bogs; shade.

Androsace subumbellata. A two-inch bouquet of minute white stars; annual.

Campanula uniflora. Half-inch blue-purple bells, singly on slender erect stems; alpine; 4 inches.

Delphinium Nelsonii. Intense larkspur-blue flowers. Slender 1 ft. stems from tuberous roots.

Douglasia montana. A Drosace cousin; mat-forming rosettes covered with pink flowers early spring; subalpine. Any well drained soil.

Draba glacialis (saximontana). Aptly named, found high on bare calcareous scree. A diminutive with strong appeal; 1 inch.

Erigeron melanocephalus. Deep lavender to purple alpine daisy; 3 to 6 inches.

Eritrichium Howardii (elongatum). Similar to *E. argenteum*, with longer stems and fewer flowers; alpine.

Fallugia paradoxa, Apache Plume. Much-branched shrub, showy white flowers followed by attractive seed plumes; sunny rocky cliffs; 3 to 5 ft.

Gentiana barbellata. A rare and beautiful Gentian; silver-blue, fringed and spicily fragrant; alpine bogs; 6 inches.

Gentiana plebeja, Rose Gentian. Pale blue flowers in clusters; alpine bogs; 4 to 8 inches.

Gilia pungens. Suggests a much branched, somewhat wiry phlox; flowers white, often tinged yellow or pink. Dry rocky slopes; 5 to 10 inches.

Mertensia Bakeri. Brilliant sky-blue flowers in clusters on six-inch erect stems; alpine.

- Pentstemon acaulis.** Something distinctly new in Pentstemons. Low dense mats of erect filiform leaves, suggesting *Silene acaulis*, sprinkled with delightful little upturned bells of clearest blue; dry sandy soil.
- Pentstemon crandallii procumbens.** Tiny round shiny leaves on trailing stems; sparsely spattered with clear blue flowers; stingy about seeding.
- Pentstemon oliganthus.** Little clear blue trumpets, white at the blow end, in loose clusters on slender 10-inch stems; any well drained soil.
- Pentstemon teucroides.** A low flat wiry edition of *P. crandallii*; flowers less open.
- Phlox caespitosa.** A *Ph. condensata* loosened up; myriads of white stars; subalpine; rocky gravel.
- Phlox longifolia.** Clear rose-pink flowers, ½-inch diameter, on erect stems; leaves sparse, long and very narrow; dry non-acid soil.
- Phlox multiflora.** Close rounded cushions lavishly decorated with clear stars, usually white, sometimes lavender or rose. A really good rock garden plant. Found in alkali clay and in dry sand.
- Physaria floribunda (acutifolia).** Silver-gray, well tailored rosettes; slender stems carrying yellow flowers; found in limestone on high mountains.
- Primula americana (farinosa).** Small pinky-lavender flowers tightly bunched on erect stems; reverse of leaves mealy; subalpine bogs.
- Purshia tridentata,** Antelope Brush. A wiry much branched dwarf shrub, small yellow flowers; rocky hillsides.
- Smelowskia americana (calycina).** A cruciferae of silver-gray feathery foliage; erect stems bearing heads of white flowers in generous quantity; high alpine; 4 inches.
- Spiranthes romanzoffiana (stricta),** Ladies' Tresses. Fragrant white flowers crowded on a twisted spike; 6 inches.



Colorado Blue Spruce Hedge

